Abstract

Grape is a very important product in India. In India, Maharashtra, Karnataka and Tamil Nadu are the main contributors to the production of grapes. Out of the total production of grapes, 70% is produced in Nashik district itself. However, vineyard farming in Nashik faces many threats. Downy mildew and mealy bug are the pests that create the most problems to vineyards. The proposed system's aim is to try and provide automated remote monitoring of the vineyard and detection of disease and if required starting spraying devices remotely. The implemented system uses sensor nodes to measure weather of the environment; the measured data collected is sent to a central server using the Internet. Users can access data remotely using internet connection. In this system a sensor network is fixed at the vineyard and end user move at any location. The end user can access central server data with the help of an android application. Disease detection is done with the help of algorithms. All available weather monitoring systems do not send data directly to the end user. It requires a data logger to read data from a monitoring node and provide it as an input to the software module for further analysis. It increases the delay in disease prediction, labor cost, and dependency. Another limitation of available systems is that the user has to compulsorily visit the vineyard to read weather data.
References

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Index Terms

Computer Science
Embedded Systems
Keywords
Wireless  Disease  Downy Mildew  Vineyard  Sensor  Network  Agriculture  Weather etc